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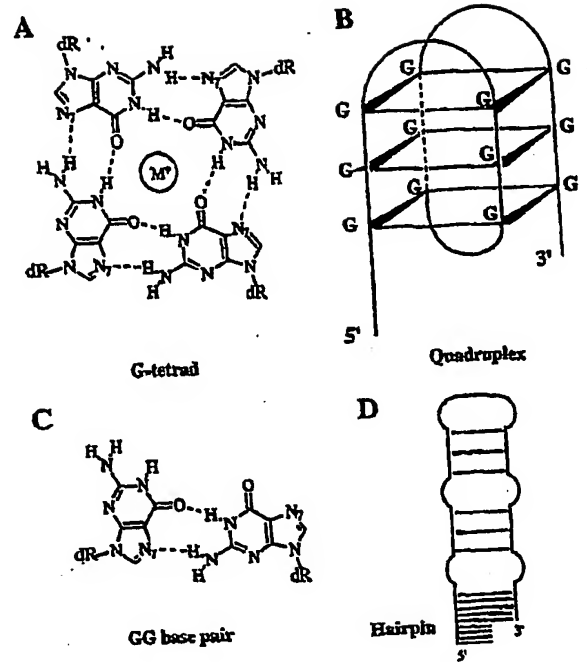


Fig. 1

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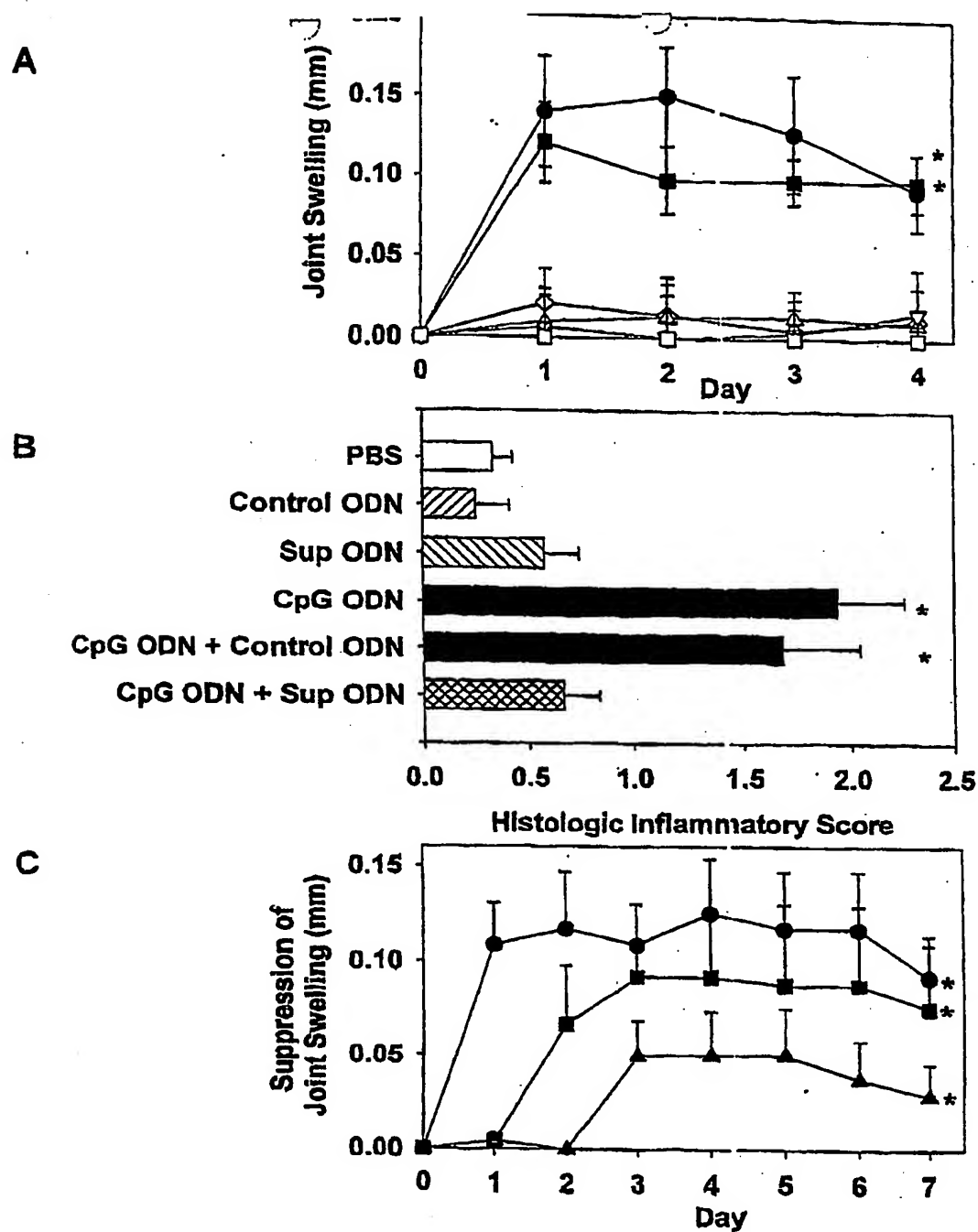


Fig. 2

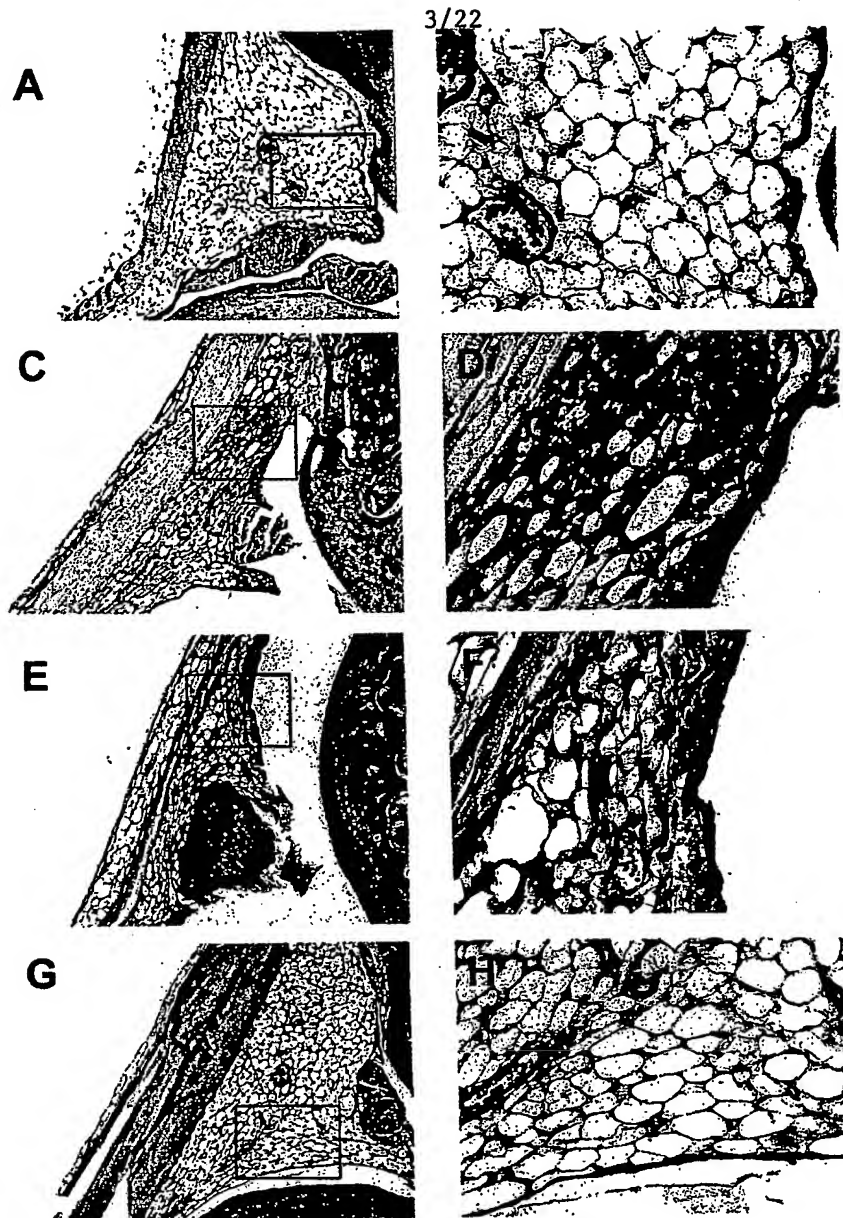


Fig. 3

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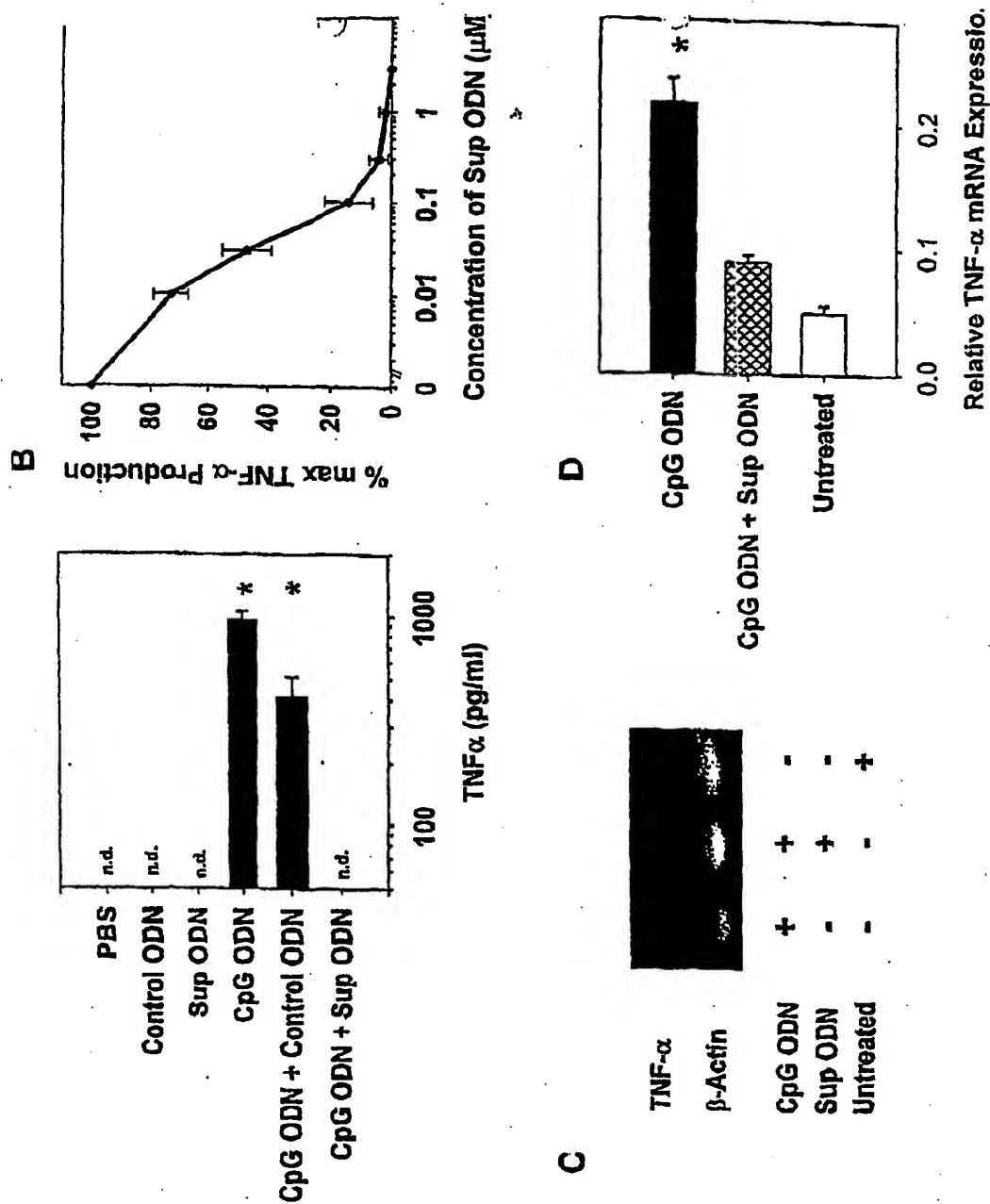


Fig. 4

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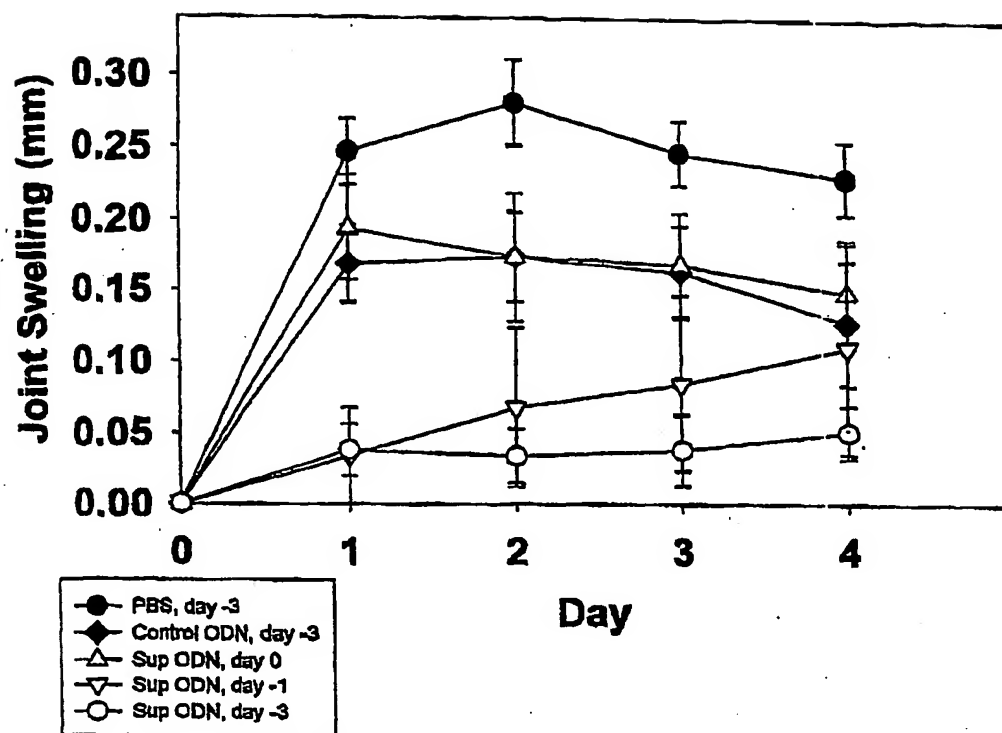
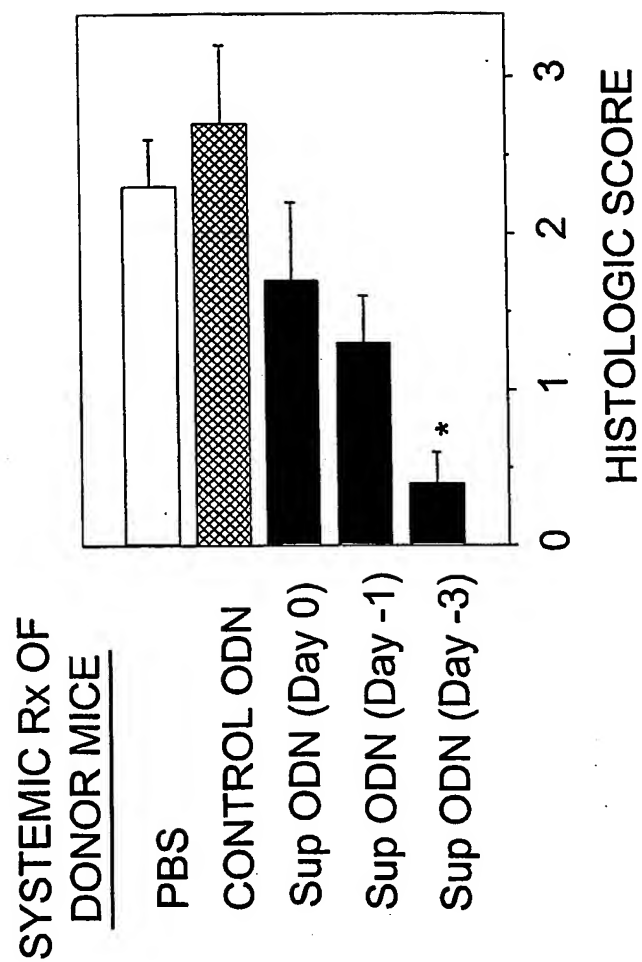


Fig. 5

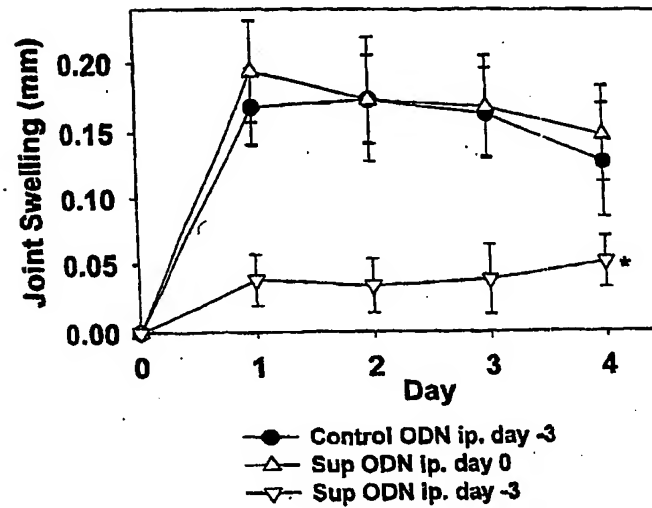
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Fig 6

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systemic effect of Sup ODN on CpG-Induced Arthritis

A



B

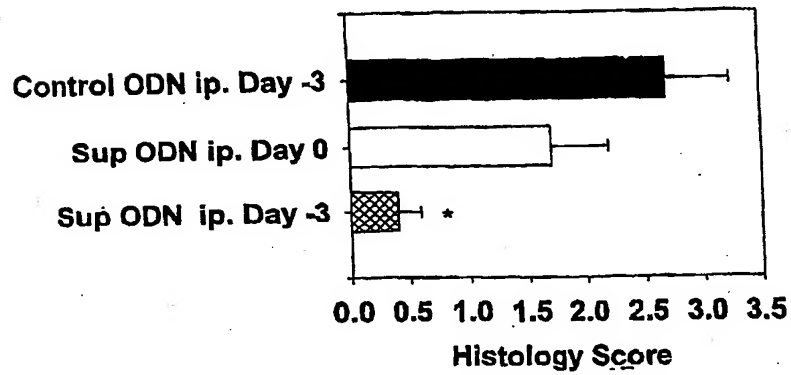


Fig. 7

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Fig. 8A

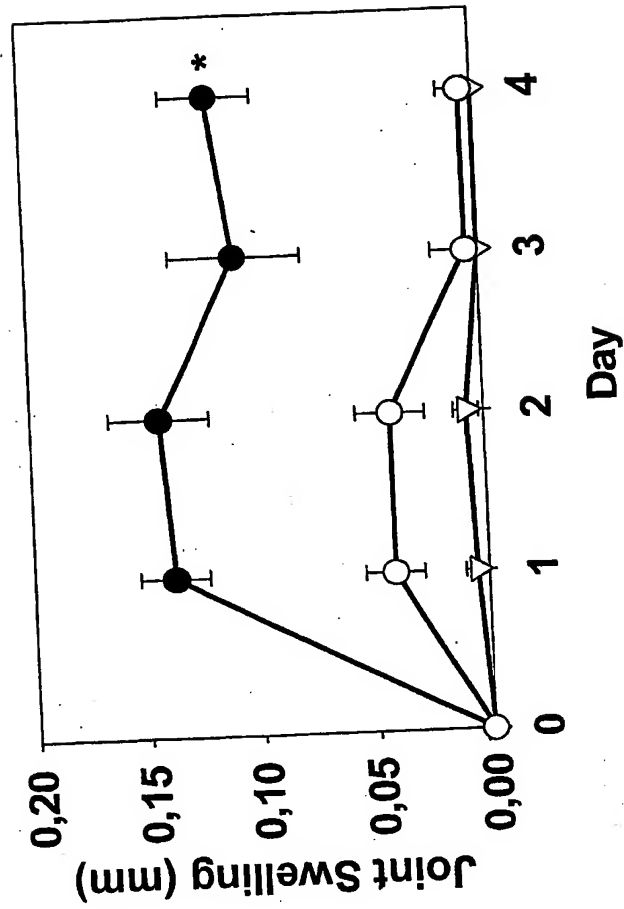
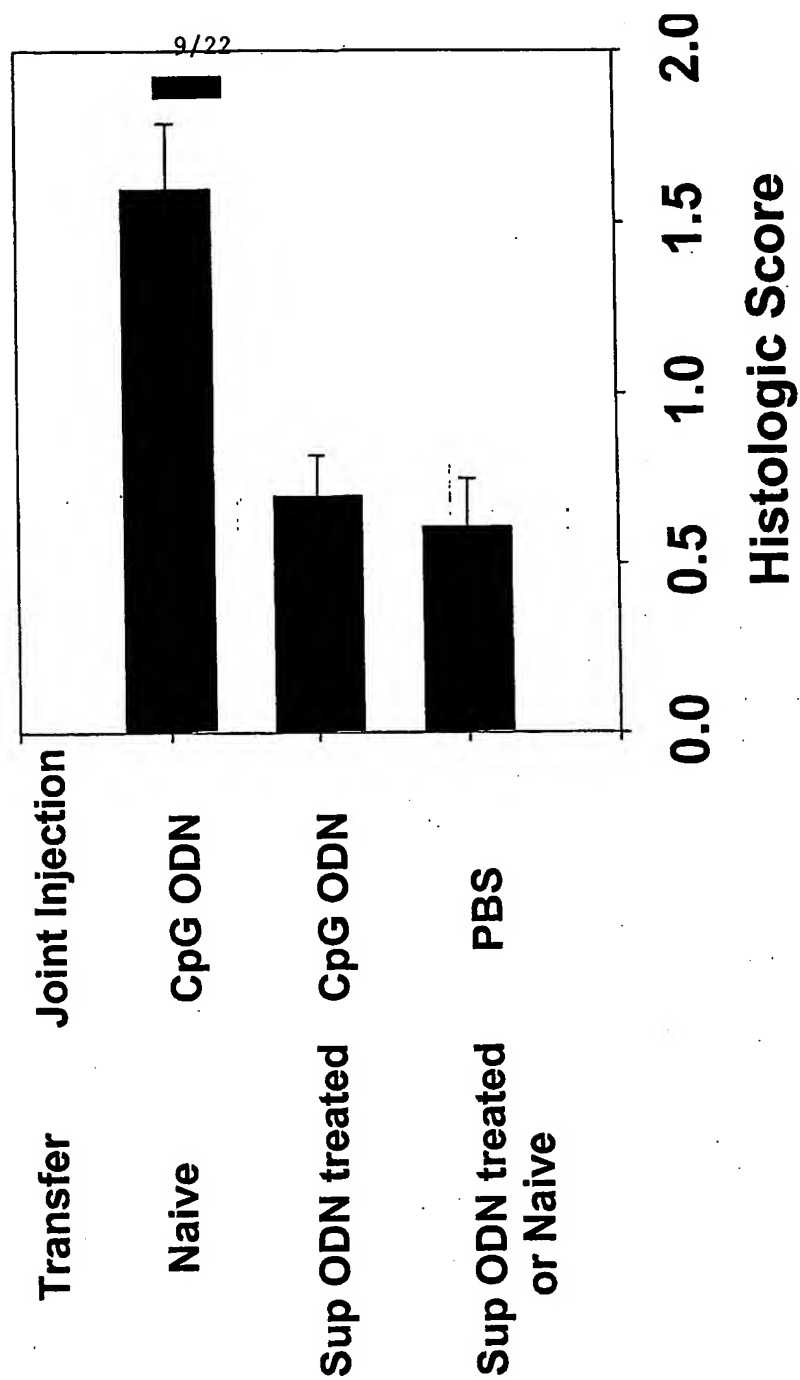


Fig 8B

Spleen cell Transfer



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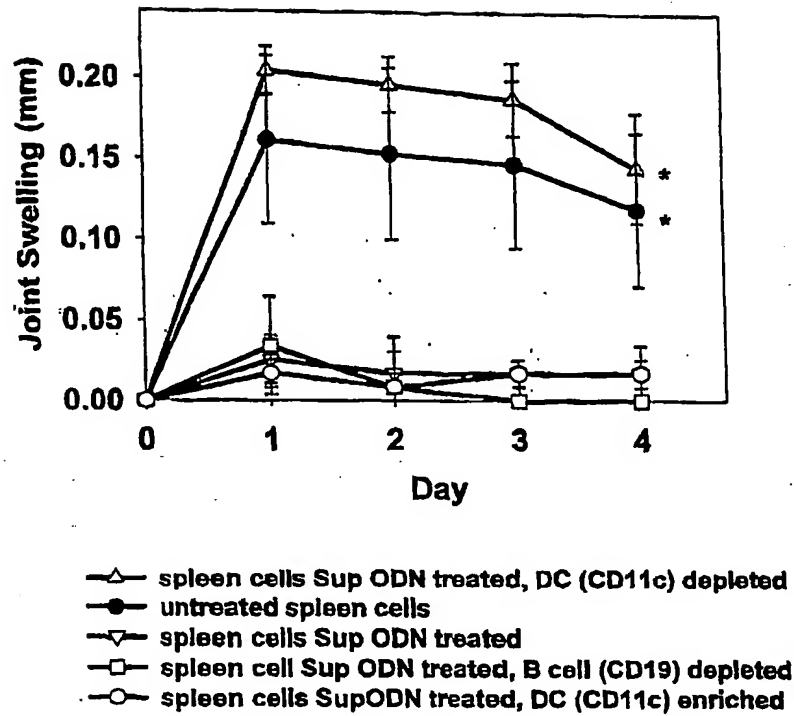
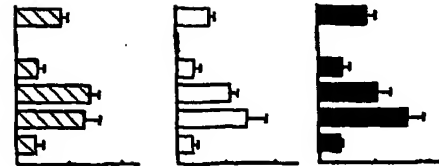


Fig. 9

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a Mammalian DNA suppresses CpG DNA induced immune activation

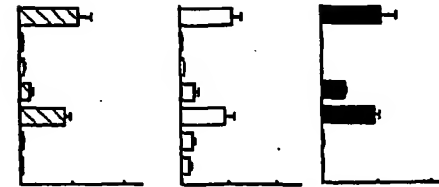
Bacterial DNA
Mammalian DNA
Bacterial DNA + Mammalian DNA
CpG ODN
CpG ODN + Bacterial DNA
CpG ODN + Mammalian DNA

**b Telomeric TTAGGG repetitive motif is suppressive**

Ellipticity (mdeg/abs)

CpG ODN
CpG ODN + (TTAGGG)₄
CpG ODN + (TTAGGG)₃
CpG ODN + (TTAGGG)₂
CpG ODN + (TTAGGG)₁
CpG ODN + TCAACCTTCATTAGGG
CpG ODN + TTAGGGTCAACCTTCA

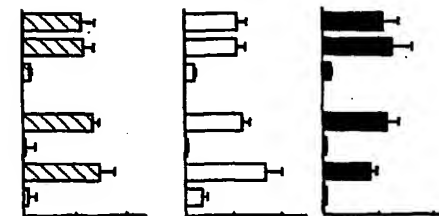
1.4
7.1
4.8
2.6
1.2
3.4
3.4

**c Suppressive motif is active in trans and cis***Trans*

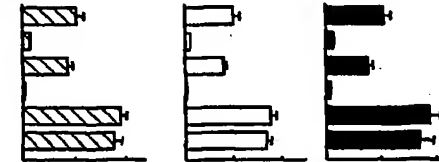
CpG ODN
CpG ODN + Control ODN
CpG ODN + Suppressive ODN

Cis

(Control-CpG) ODN
(Suppressive-CpG) ODN
(Control-CpG) ODN + CpG ODN
(Suppressive-CpG) ODN + CpG ODN

**d Suppressive ODN selectively block CpG DNA induced immune activation**

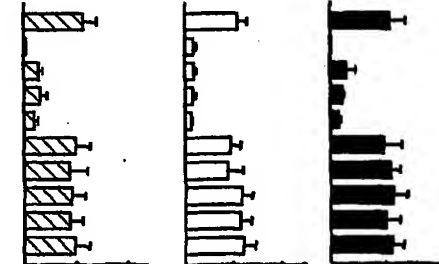
CpG ODN
CpG ODN + Suppressive ODN
Bacterial DNA
Bacterial DNA + Suppressive ODN
LPS
LPS + Suppressive ODN

**e Poly G's are critical for suppression**

CpG ODN
CpG ODN + TTAGGGTCAACCTTCA
CpG ODN + -AC-
CpG ODN + ACT-
CpG ODN + AAT-
CpG ODN + ---AA-
CpG ODN + ---TT-
CpG ODN + ---TG-
CpG ODN + ---TG'G-
CpG ODN + ---TG'G'G-

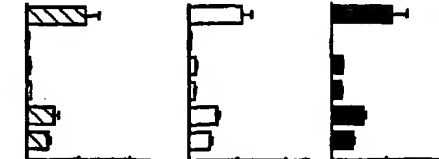
1.4
3.4

1.2
1.0
0.8

**f G-tetrad forming non-telomere sequences are also suppressive**

CpG ODN
CpG ODN + GGGTGGGTGGGTATTACCATTA
CpG ODN + TGGGCGGTTCAACCTTCA
CpG ODN + CCTCAAGCTTGAGGGG
CpG ODN + CCGGCCGGCCGGCCGG
CpG ODN + TTGGTTGGTTGGTTGG

1.4
4.9
4.1
4.6
2.8
3.2



0 6 12 IL-6 (ng/ml) 0 6 12 IL-12 (ng/ml) 0 800 1600 IFN γ (pg/ml)

FIG. 10

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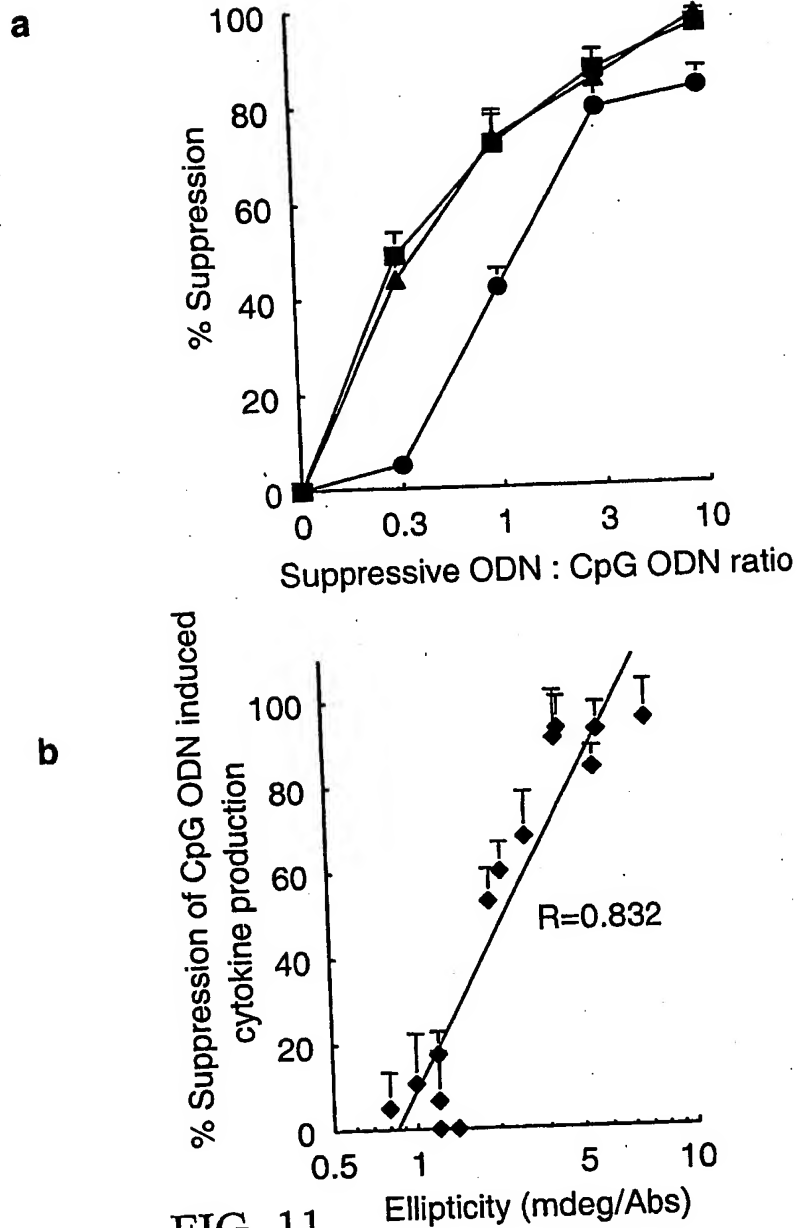


FIG. 11

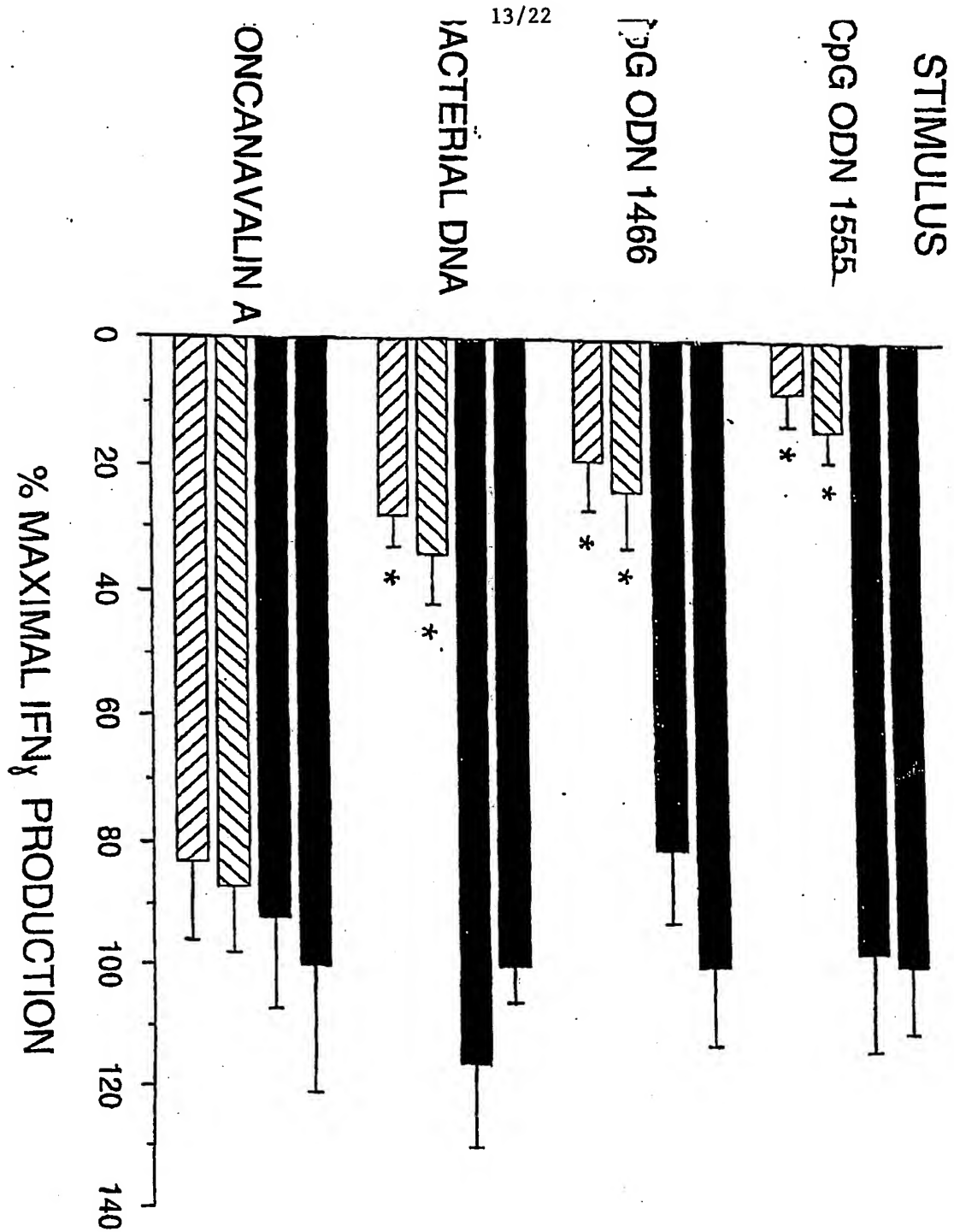


Fig. 12

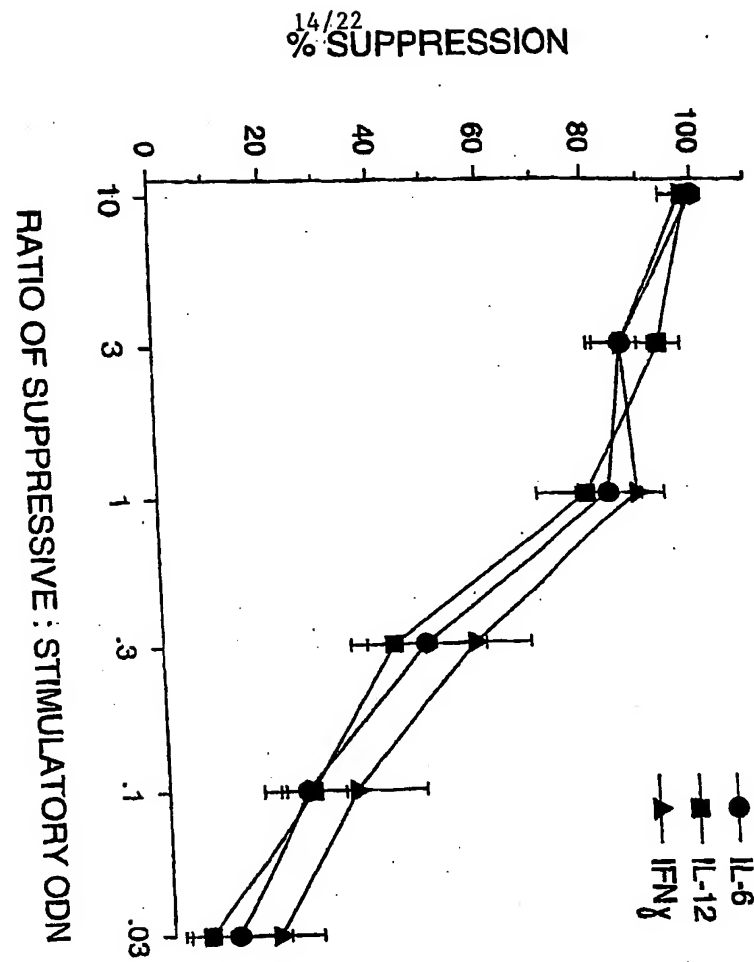


Fig. 13

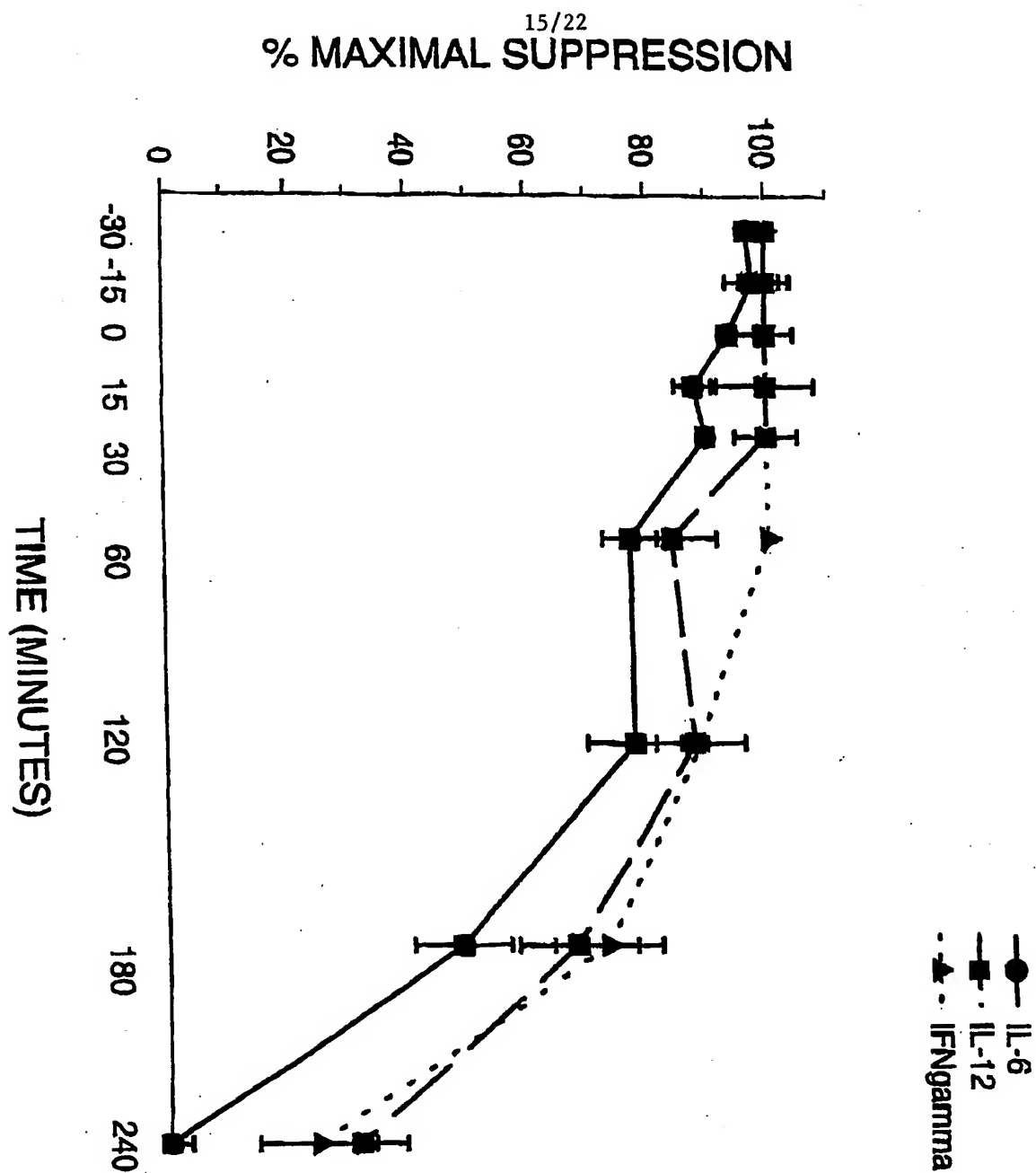


Fig. 14

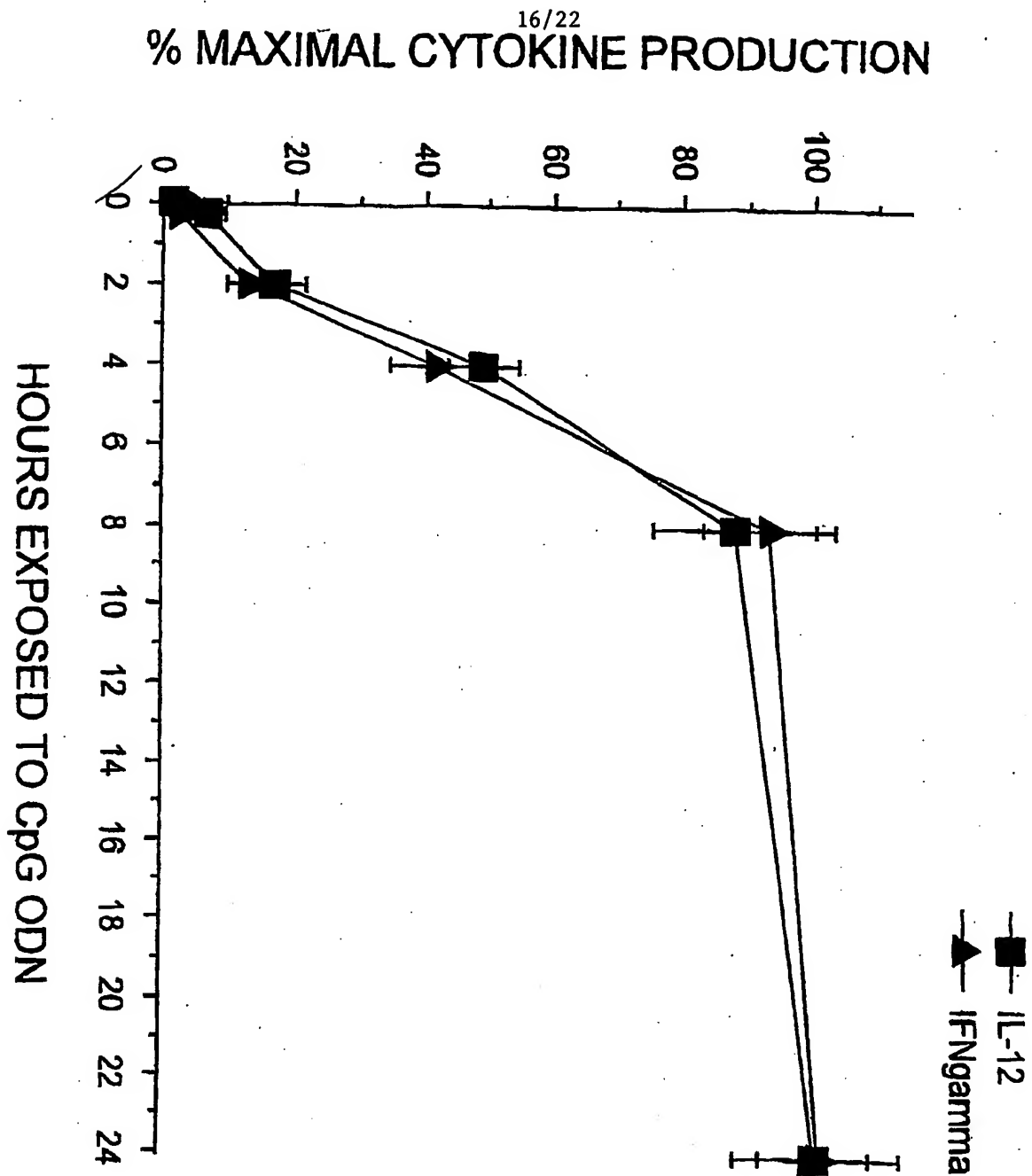


Fig. 15

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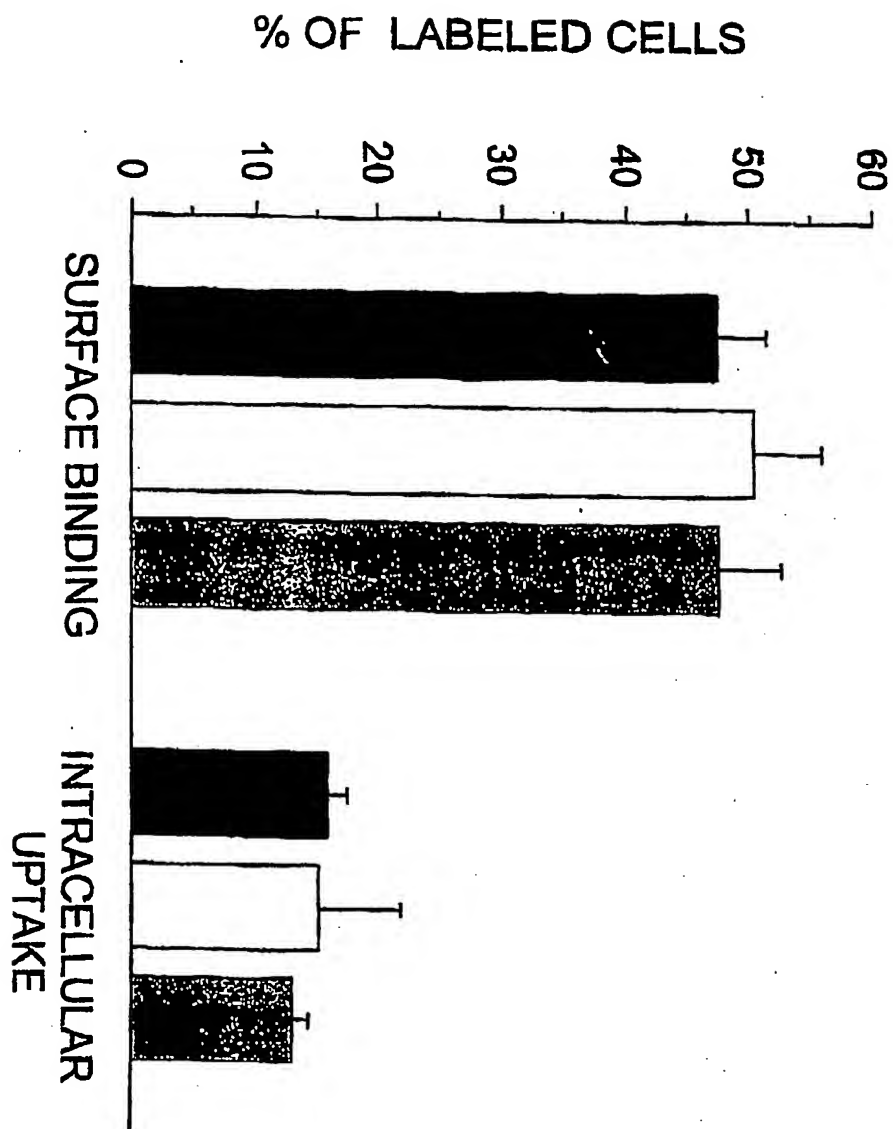


Fig. 16

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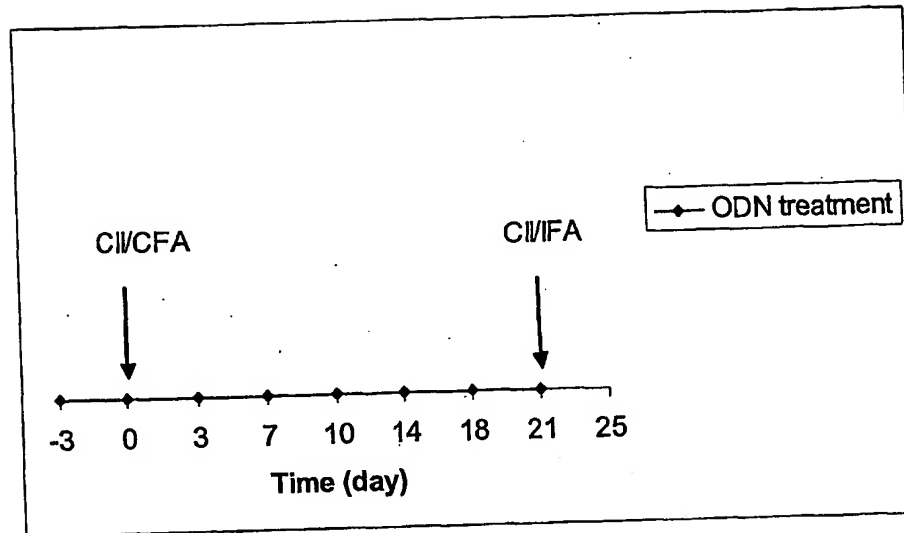


FIG. 17

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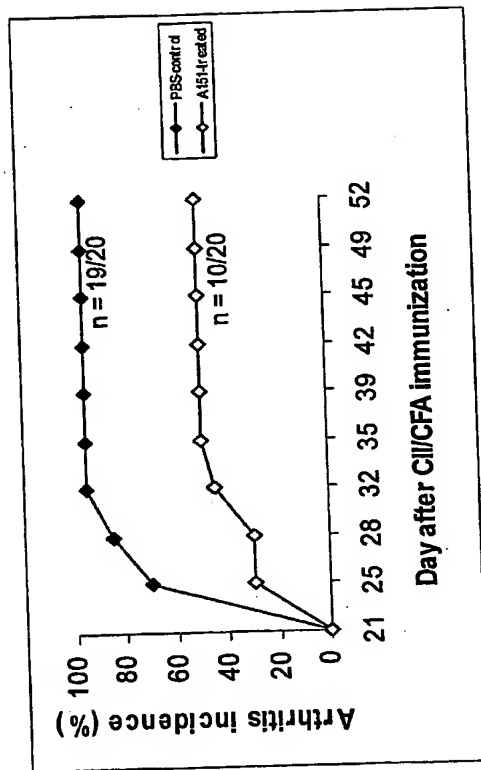


FIG. 18A

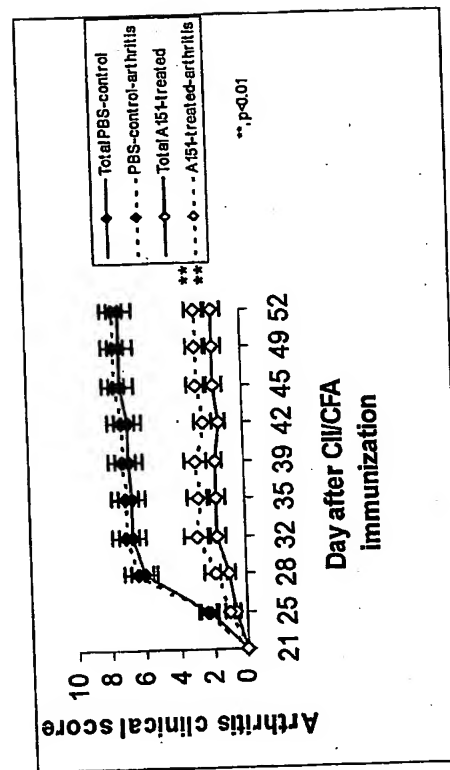


FIG. 18B

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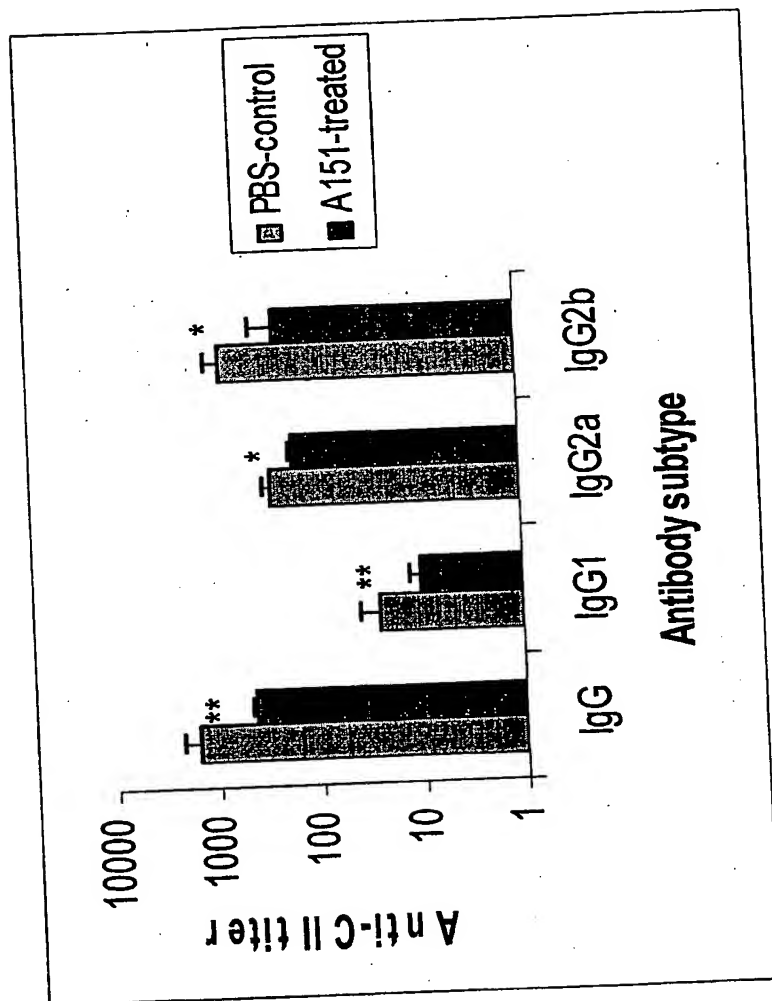


FIG. 19

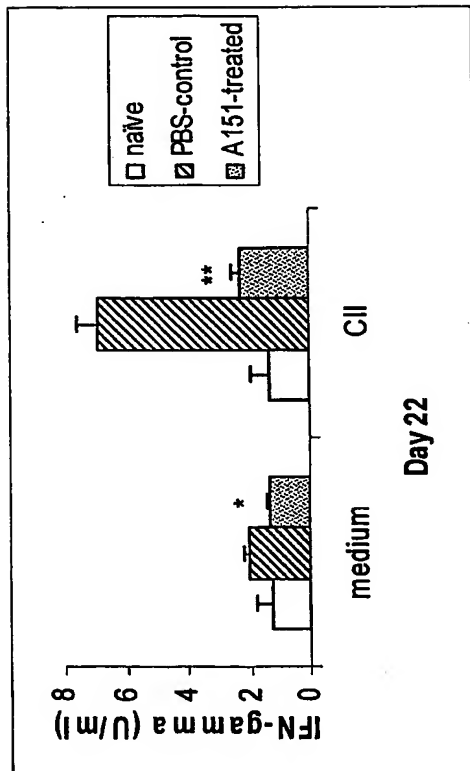


FIG. 20A

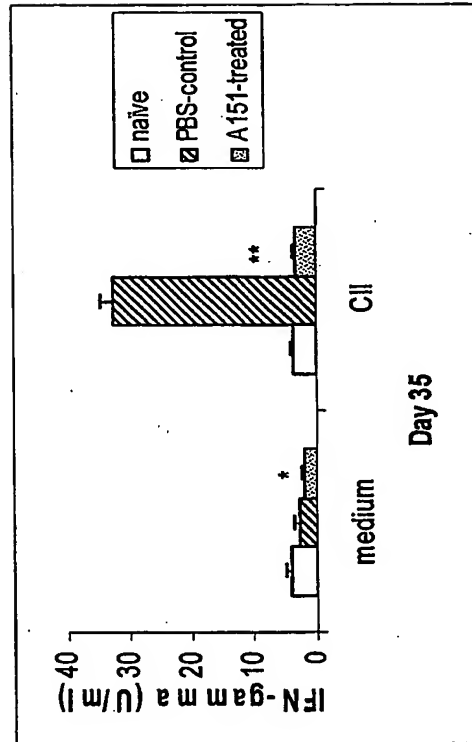


FIG. 20B

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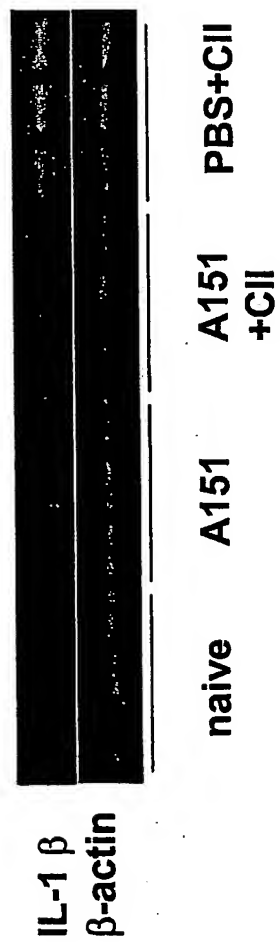


FIG. 21